

Prior to examining this application further, please amend it as follows:

Please cancel existing claims 1 to 36 without prejudice or disclaimer and examine the newly presented claims 37 to 71.

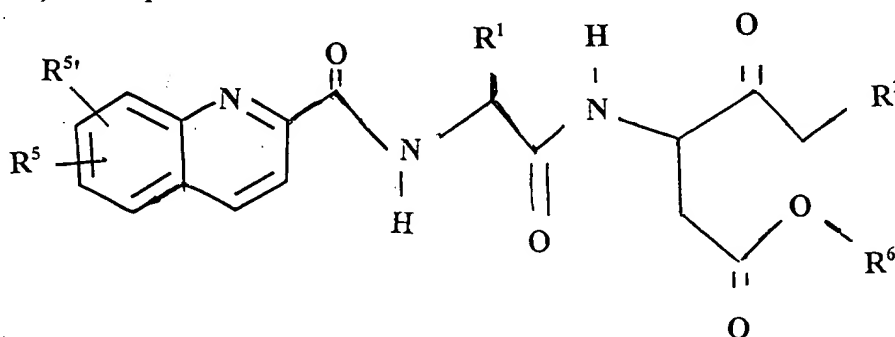
IN THE CLAIMS:

Claims 1-36 (Cancelled)

37. (New) A method of inhibiting a caspase comprising administering a compound according to claim 1 to a human subject in need thereof for a time and under conditions effective to inhibit a caspase.

38. (New) A method of inhibiting apoptosis comprising administering a compound according to claim 1 to a human subject in need thereof for a time and under conditions effective to inhibit caspase.

39. (New) A compound of the structure:



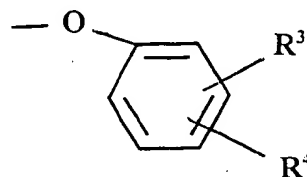
wherein in Structure I

R¹ is selected from the group consisting of alkyl, substituted alkyl, aryl, and substituted aryl which group -N-CH-(R¹)-(C=O)- will produce a natural amino acid structure or an unnatural amino acid structure, and;

the carbon adjacent to R¹ group is in the D or L configuration;

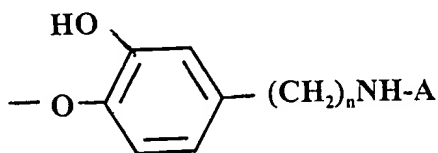
R² is selected from the group consisting of

- F; and

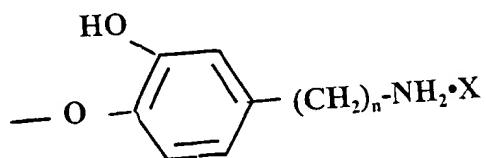


wherein R^3 and R^4 are each independently selected from the group consisting of hydrogen, alkyl, fluoro, chloro, carboxyl, alkoxy, alkyl carbonyl, aryl carbonyl, and amino;
and R^5 and R^5 are each independently selected from hydrogen, alkyl, alkoxy, fluoro, chloro, carboxy, alkyl carbonyl, aryl carbonyl, amino and together form a cyclic structure or a heterocyclic structure; and

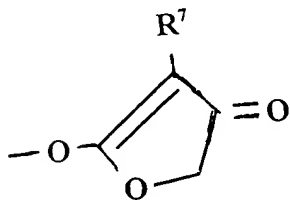
R^6 is selected from alkyl having 1 to 10 carbon atoms, aryl or substituted aryl;



wherein A is a covalently bonded amine protecting group, and n is 1-4;



wherein X is a pharmaceutically acceptable salt, and n is 1-4; or

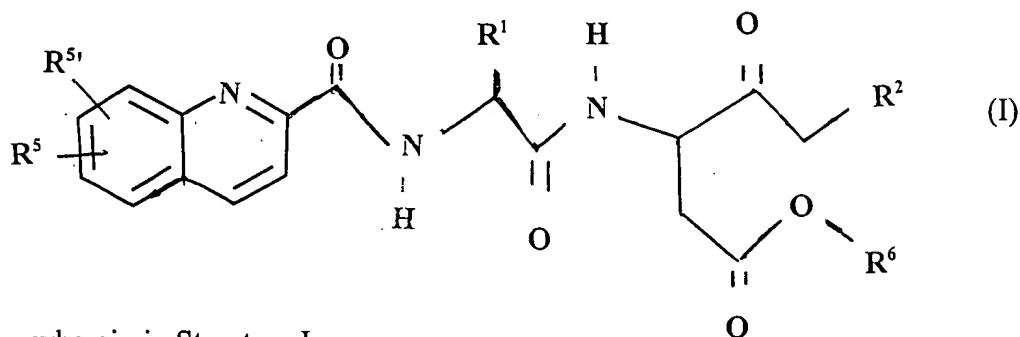


;

wherein R⁷ is selected from the group consisting of alkyl having 1 to 10 carbon atoms, aryl and alkylaryl.

40. (New) The method according to claim 38 for use as a protease inhibitor, wherein the composition comprises:

(a) a compound of the structure:



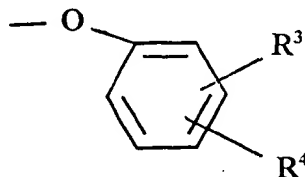
wherein in Structure I

R^1 is selected from the group consisting of alkyl, substituted alkyl, aryl, and substituted aryl which group $-N-CH(R^1)-(C=O)-$ will produce a natural amino acid structure or an unnatural amino acid structure, and;

the carbon adjacent to R^1 group is in the D or L configuration;

R^2 is selected from the group consisting of

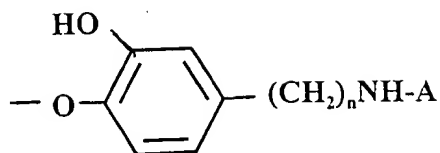
- F; and



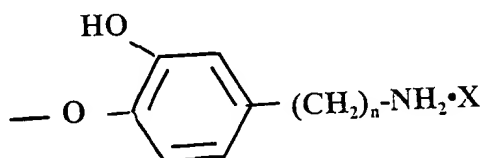
wherein R^3 and R^4 are each independently selected from the group consisting of hydrogen, alkyl, fluoro, chloro, carboxyl, alkoxy, alkyl carbonyl, aryl carbonyl, and amino;

and R^5 and $R^{5'}$ are each independently selected from hydrogen, alkyl, alkoxy, fluoro, chloro, carboxy, alkyl carbonyl, aryl carbonyl, amino, and together can form a cyclic ring structure in a heterocyclic ring structure; and

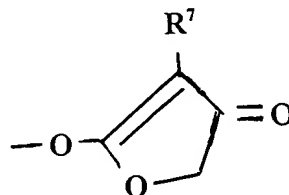
R^6 is selected from alkyl having 1 to 10 carbon atoms, aryl or substituted aryl;



wherein A is a covalently bonded amine protecting group, and n is 1-4;



where X is the pharmaceutically accepted salt, and n is 1-4;



wherein R⁷ is selected from the group consisting of alkyl having 1 to 10 carbon atoms, aryl and alkylaryl or the pharmaceutically acceptable acid or base salts thereof, and

(b) a pharmaceutically acceptable excipient.

41. (New) The method of Claim 40 wherein in the structure:

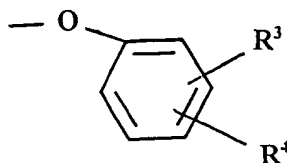
R¹ is selected from isopropyl or isobutyl;

R² is F ; and R⁵ is hydrogen.

42. (Original) The method of Claim 40 wherein in the structure:

R¹ is selected from isopropyl or isobutyl;

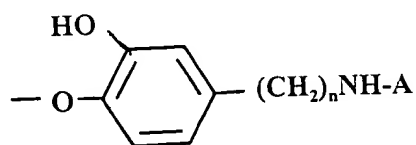
R² is



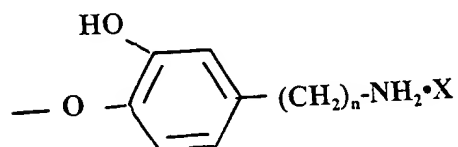
wherein R^3 and R^4 are each fluoro; and R^5 is hydrogen.

43. (New) The method of Claim 42 wherein in the structure, R^3 and R^4 in the 2 and 6 positions of the phenyl ring.

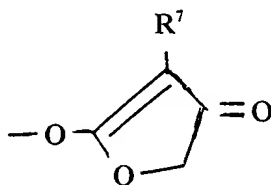
44. (New) The method of Claim 43 wherein R^2 is



45. (New) The method of Claim 43 wherein R^2 is

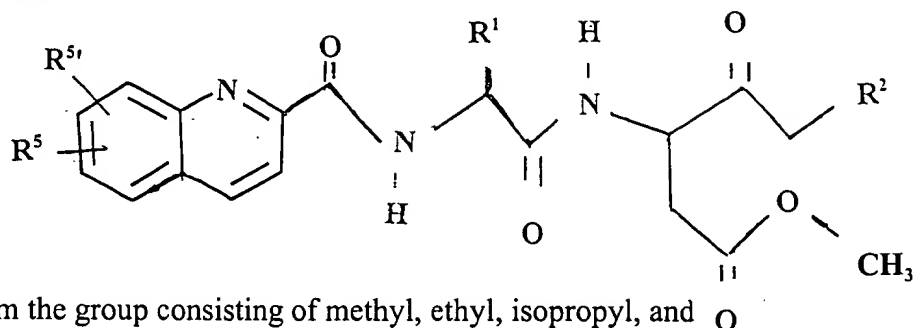


46. (New) The method of Claim 43 wherein R^2 is



47. (New) The method of claim 39 for use as a protease inhibitor as a composition, wherein the composition comprises,

(a) a compound of the structure:

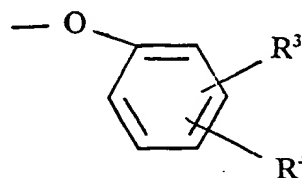


wherein

R^1 is selected from the group consisting of methyl, ethyl, isopropyl, and iso-butyl;

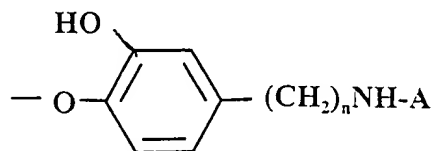
R^2 is selected from the group consisting of:

-F, or

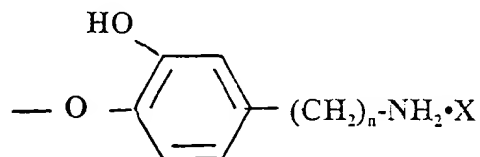


wherein R^3 and R^4 are each independently selected from the group consisting of hydrogen, alkyl having 1 to 10 carbon atoms, fluoro, chloro and amino;

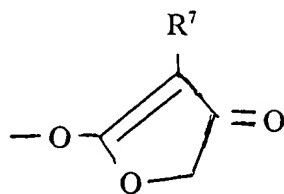
and R^5 and $R^{5'}$ are each selected from the group consisting of hydrogen having 1 to 10 carbon atoms, alkyl having 1 to 10 carbon atoms, alkoxyl having 1 to 10 carbon atoms, fluoro, and chloro;



wherein A is a covalently bonded amine protecting group, and n is 1-4;

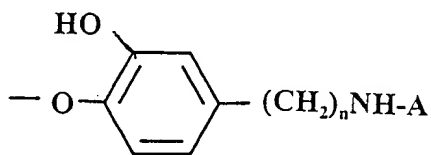


wherein X is a pharmaceutically acceptable salt and n is 1-4;

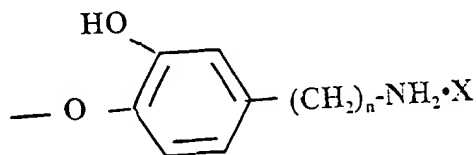


wherein R^7 is selected from the group consisting of alkyl having 1 to 10 carbon atoms, aryl and alkylaryl.

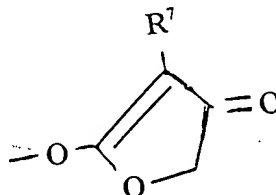
48. (New) The method of Claim 47 wherein R^2 is



49. (New) The method of Claim 47 wherein R^2 is

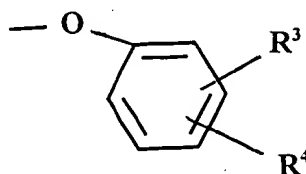


50. (New) The method of Claim 47 wherein R^2 is



51. (New) The method of Claim 47, wherein in the structure:
R¹ is selected from isopropyl or iso-butyl;
R² is -F; and
R⁵ is hydrogen.

52. (New) The method of Claim 47 wherein, in the structure
R¹ is selected from isopropyl or isobutyl;
R² is

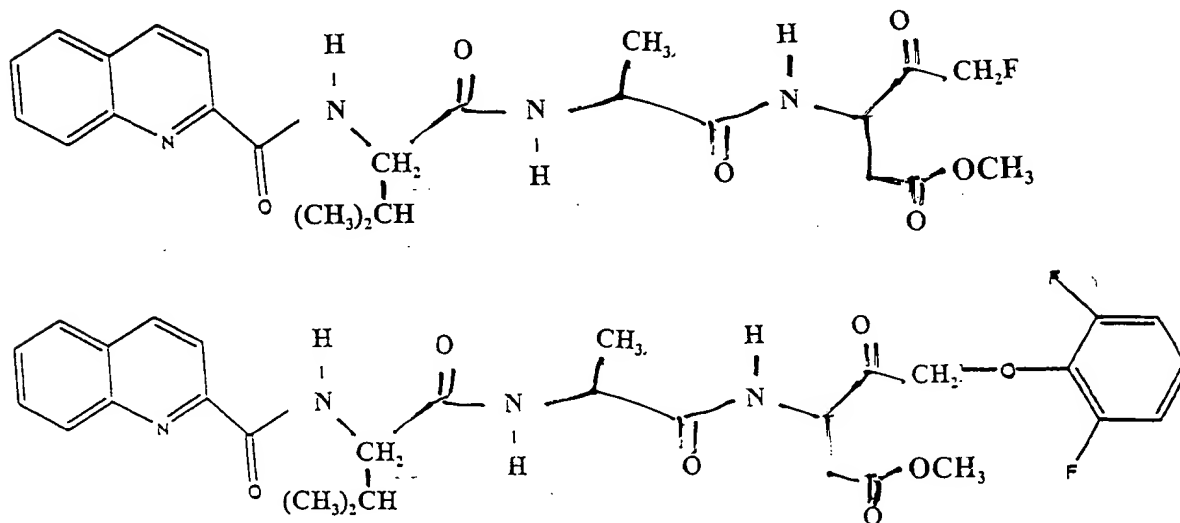


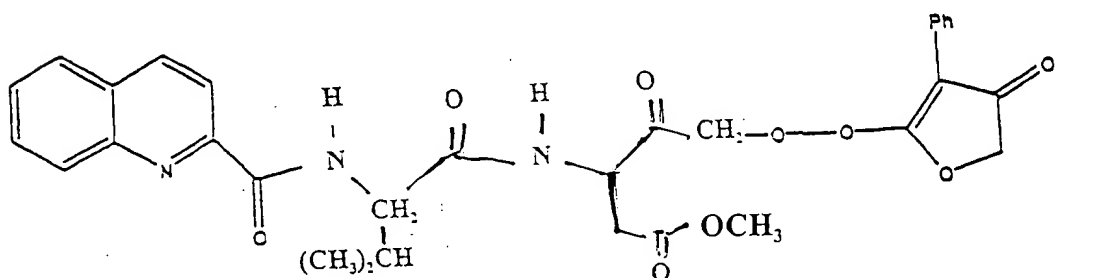
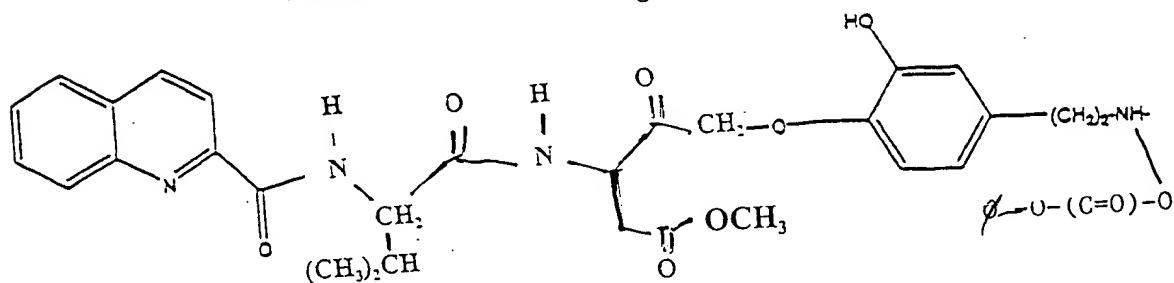
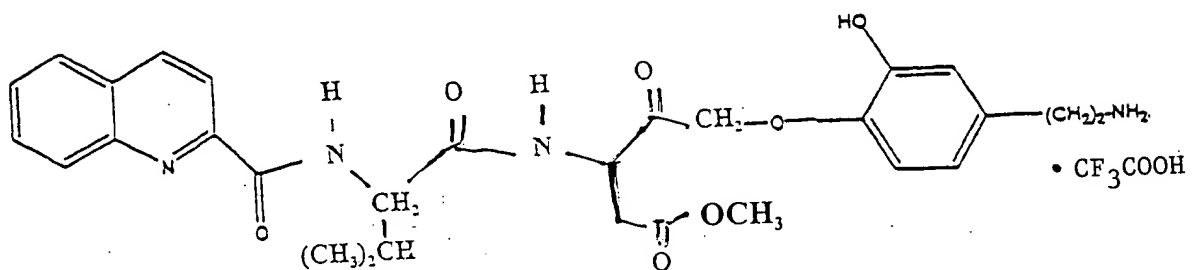
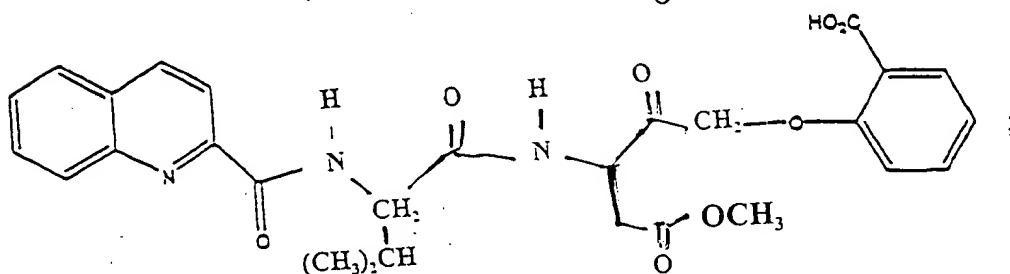
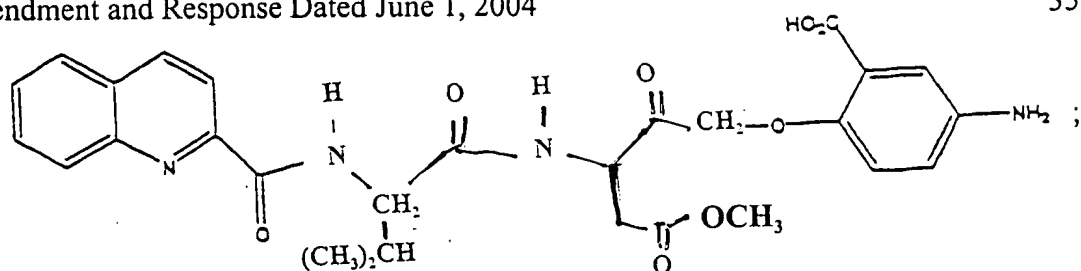
wherein R³ and R⁴ are each fluoro; and R⁵ is hydrogen.

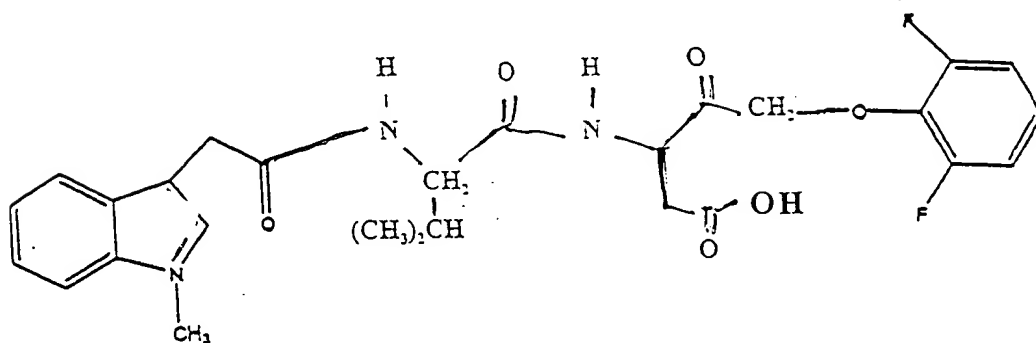
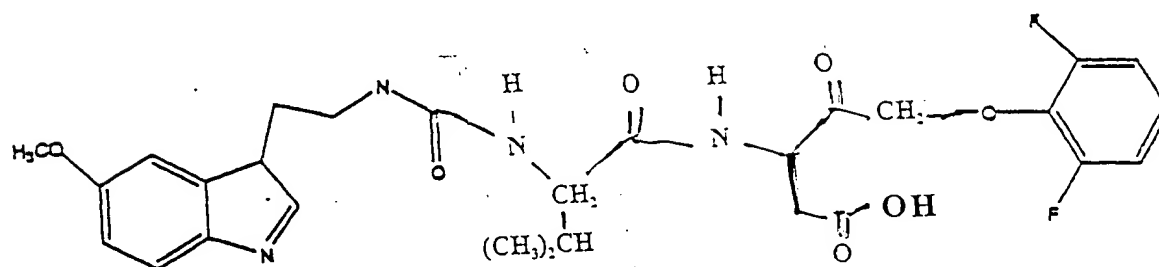
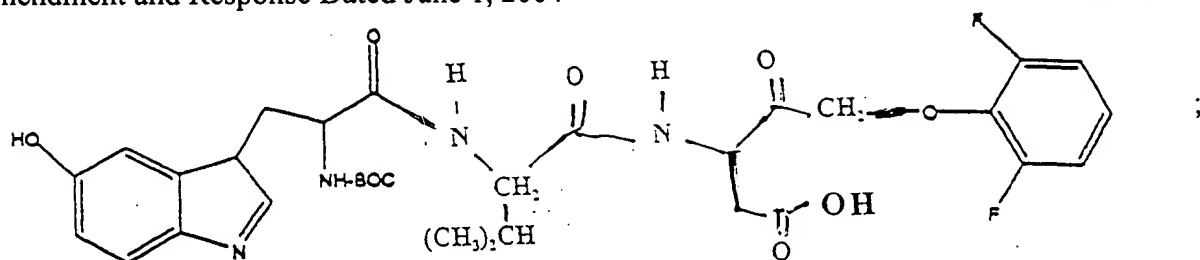
53. (New) The method of Claim 47 wherein in the structure, groups R³ and R⁴ are in the 2 and 6 positions of the phenyl ring.

54. (New) A method of Claim 38 for use as an inhibitor to caspase or a caspase-like enzyme, which method comprising using:

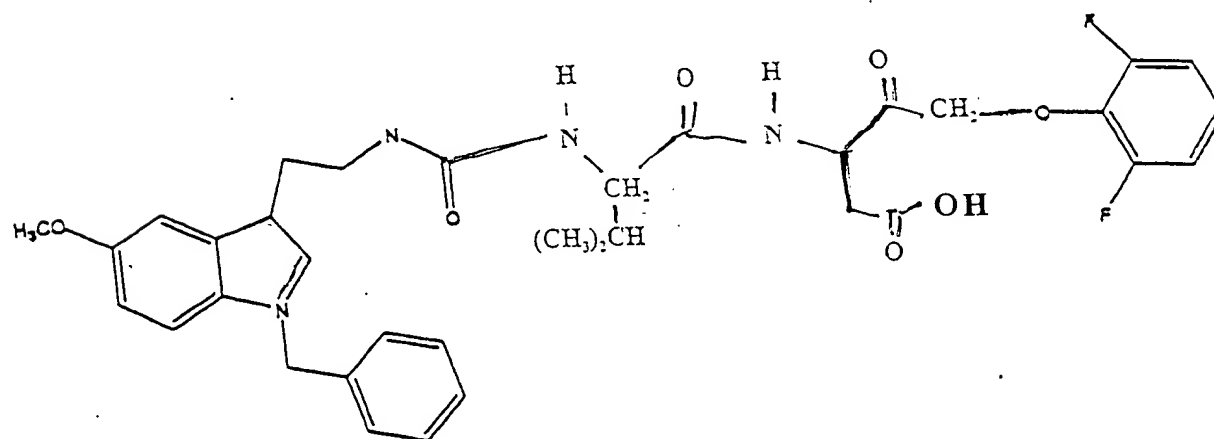
- (a) a compound selected from the group consisting of:





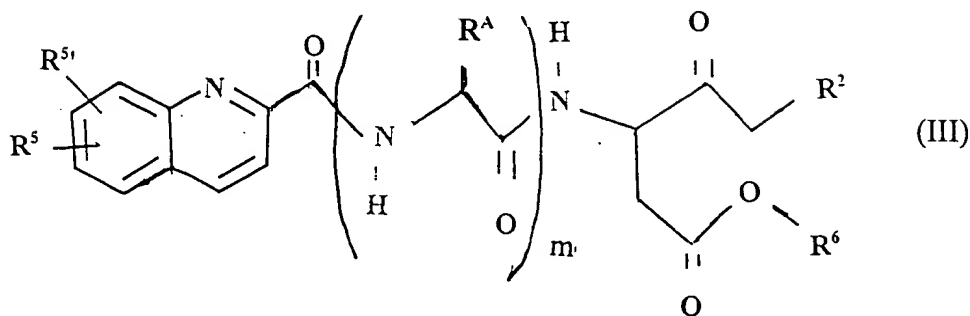


; and



(b) a pharmaceutically acceptable excipient.

55. (New) A compound of the structure:



wherein in Structure III:

m is 1, 2 or 3, creating 1, 2 or 3 amino acid linkages, such that

when m = 1, $R^A = R^1$,

when m = 2, R^A is R^1 and R^{1B} in the separate amino acids and

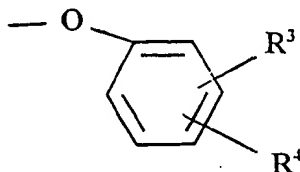
when m = 3, R^A is R^1 , R^{1B} and R^{1C} wherein R^1 , R^{1B} and R^{1C} in the separate amino acids

which amino acids are the same or different amino acid when R^1 , R^{1B} and R^{1C} are independently selected from the group consisting of alkyl, substituted alkyl, aryl, and substituted aryl which group -N-CH(R^1)-(C=O)-; N-CH(R^1)-(C=O)-NH-CH(R^{1B})-(C=O); or NCH(R^1)(C=O)-NH-CH(R^{1B})(C=O)-NHCH(R^{1C})(C=O)- produces natural amino acid structures or an unnatural amino acid structures, and;

the carbon adjacent to R^1 group is in the D or L configuration;

R^2 is selected from the group consisting of:

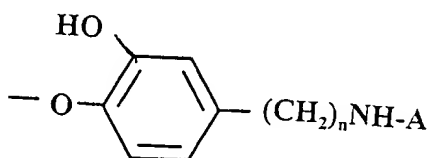
- F; and



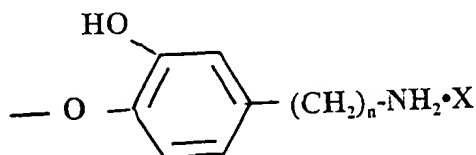
wherein R^3 and R^4 are each independently selected from the group consisting of hydrogen, alkyl, fluoro, chloro, carboxyl, alkoxy, alkyl carbonyl, aryl carbonyl, and amino;
 and R^5 and $R^{5'}$ are each independently selected from hydrogen, alkyl, alkoxy, fluoro,

chloro, carboxy, alkyl carbonyl, aryl carbonyl, amino and together form a cyclic ring structure or a heterocyclic ring structure; and

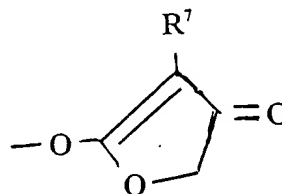
R⁶ is selected from alkyl having 1 to 10 carbon atoms, aryl or substituted aryl;



wherein A is a covalently bonded amine protecting group, and
n is 1-4, preferably 2;



where X is the pharmaceutically accepted salt, and
n is 1-4, preferably 2; and



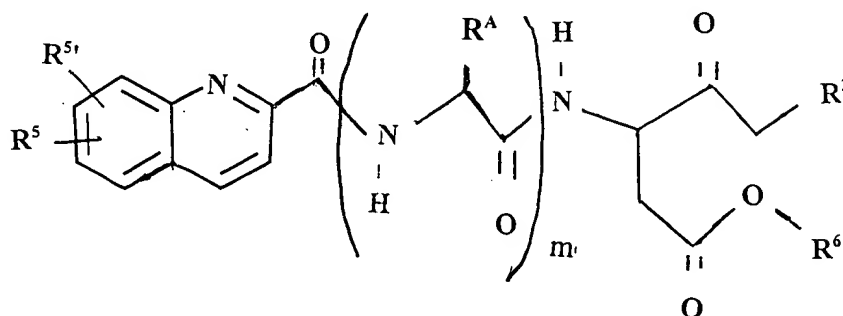
wherein R⁷ is selected from the group consisting of alkyl having 1 to 10 carbon atoms, aryl and alkylaryl or the pharmaceutically acceptable acid or base salts thereof.

56. (New) The compound of Claim 55 wherein m = 2, R¹ and R^{1B} are each independently selected from methyl, ethyl, isopropyl and t-butyl.

57. (New) The compound of Claim 55 wherein m = 3, R¹, R^{1B} and R^{1C} are each independently selected from methyl, ethyl, isopropyl and t-butyl. 22. The compound of Claim 20 wherein R² is F or 2,6-difluorophenoxy, R⁵ and R^{5'} are each hydrogen and R⁶ is methyl.

58. (New) The compound of Claim 57 wherein R² is F or 2,6-difluorophenoxy, R⁵ and R^{5'} are each hydrogen and R⁶ is methyl.

59. (New) The protease inhibitor for use as a pharmaceutical composition comprising a compound selected from the structure:



wherein in Structure III:

m is 1, 2 or 3, creating 1, 2 or 3 amino acid linkages, such that

when $m = 1$, $R^A = R^1$,

when $m = 2$, R^A is R^1 and R^{1B} in the separate amino acids and

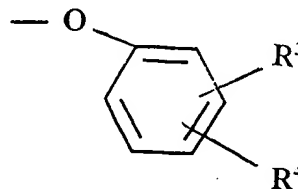
when $m = 3$, R^A is R^1 , R^{1B} and R^{1C} wherein R^1 , R^{1B} and R^{1C} in the separate amino acids

which amino acids are the same or different amino acid when R^1 , R^{1B} and R^{1C} are independently selected from the group consisting of alkyl, substituted alkyl, aryl, and substituted aryl which group $-N-CH(R^1)-(C=O)-$; $N-CH(R^1)-(C=O)-NH-CH(R^{1B})-(C=O)-$; or $NCH(R^1)(C=O)-NH-CH(R^{1B})(C=O)-NHCH(R^{1C})(C=O)-$ produces natural amino acid structures or an unnatural amino acid structures, and;

the carbon adjacent to R^1 group is in the D or L configuration;

R^2 is selected from the group consisting of:

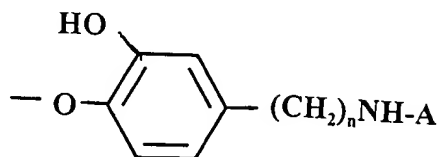
- F; and



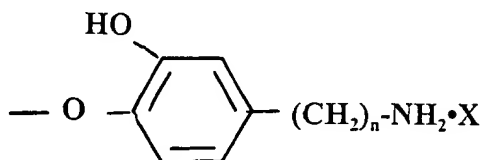
wherein R^3 and R^4 are each independently selected from the group consisting of hydrogen, alkyl, fluoro, chloro, carboxyl, alkoxy, alkyl carbonyl, aryl carbonyl, and amino;
and R^5 and $R^{5'}$ are each independently selected from hydrogen, alkyl, alkoxy, fluoro, chloro, carboxy, alkyl carbonyl, aryl carbonyl, amino and together form a cyclic ring

structure or a heterocyclic ring structure; and

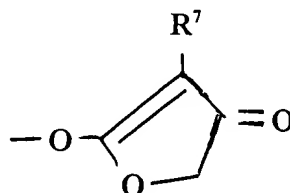
R^6 is selected from alkyl having 1 to 10 carbon atoms, aryl or substituted aryl;



wherein A is a covalently bonded amine protecting group, and
n is 1-4, preferably 2;



where X is the pharmaceutically accepted salt, and
n is 1-4, preferably 2; and



wherein R^7 is selected from the group consisting of alkyl having 1 to 10 carbon atoms, aryl and alkylaryl or the pharmaceutically acceptable acid or base salts thereof; and a pharmaceutically acceptable excipient.

60. (New) The pharmaceutical composition of Claim 59 wherein $m = 2$, R^1 and R^{1B} are each independently selected from methyl, ethyl, isopropyl and t-butyl.

61. (New) The pharmaceutical composition of Claim 59 wherein $m = 3$, R^1 , R^{1B} and R^{1C} are each independently selected from methyl, ethyl, isopropyl and t-butyl.

62. (New) The pharmaceutical composition of Claim 59 wherein R^2 is F or 2,6-difluorophenoxy, R^5 and $R^{5'}$ are each hydrogen and R^6 is methyl.

63. (New) The pharmaceutical composition of Claim 62 wherein R^2 is F or 2,6-

difluorophenoxy, R⁵ and R^{5'} are each hydrogen and R⁶ is methyl.

64. (New) The method of treatment of claim 40 for a human being diagnosed as having arthritis, metastases, meningitis, salpingitis, septic shock, respiratory diseases, inflammatory condition, cholangitis, colitis, encephalitis, endocerolitis, hepatitis, pancreatitis, reperfusion injury, ischemic diseases, myocardial infarction, stroke, ischemic kidney disease immune-based diseases, hypersensitivity, multiple sclerosis, bone diseases; and neurodegenerative diseases, Alzheimer's, Amyltrophic Lateral Sclerosis (ALS), Huntington's disease, Parkinson's disease, meningitis, spinal chord injuries and liver damage, traumatic brain injury, alopecia, AIDS and toxin induced liver disease, which method comprises:

A. Administering a therapeutically effective amount of the compound.

65. (New) The method of treatment of claim 47 of a human being diagnosed as having arthritis, metastases, meningitis, salpingitis, septic shock, respiratory diseases, inflammatory condition, cholangitis, colitis, encephalitis, endocerolitis, hepatitis, pancreatitis, reperfusion injury, ischemic diseases, myocardial infarction, stroke, ischemic kidney disease immune-based diseases, hypersensitivity, multiple sclerosis, bone diseases; and neurodegenerative diseases, Alzheimer's, Amyltrophic Lateral Sclerosis (ALS), Huntington's disease, Parkinson's disease, meningitis, spinal chord injuries and liver damage, traumatic brain injury, alopecia, AIDS and toxin induced liver disease, which method comprises:

A. Administering a therapeutically effective amount of the compound.

66. (New) The method of treatment of claim 53 of a human being diagnosed as having arthritis, metastases, meningitis, salpingitis, septic shock, respiratory diseases, inflammatory condition, cholangitis, colitis, encephalitis, endocerolitis, hepatitis, pancreatitis, reperfusion injury, ischemic diseases, myocardial infarction, stroke, ischemic kidney disease immune-based diseases, hypersensitivity, multiple sclerosis, bone diseases; and neurodegenerative diseases, Alzheimer's, Amyltrophic Lateral Sclerosis (ALS), Huntington's disease, Parkinson's disease, meningitis, spinal chord injuries and liver damage, traumatic brain injury, alopecia, AIDS and toxin induced liver disease, which method comprises:

A. Administering a therapeutically effective amount of the compound.

67. (New) The method of treatment of claim 54 of a human being diagnosed as having arthritis, metastases, meningitis, salpingitis, septic shock, respiratory diseases, inflammatory condition, cholangitis, colitis, encephalitis, endocerolitis, hepatitis, pancreatitis, reperfusion injury, ischemic diseases, myocardial infarction, stroke, ischemic kidney disease

immune-based diseases, hypersensitivity, multiple sclerosis, bone diseases; and neurodegenerative diseases, Alzheimer's, Amyotrophic Lateral Sclerosis (ALS), Huntington's disease, Parkinson's disease, meningitis, spinal cord injuries and liver damage, traumatic brain injury, alopecia, AIDS and toxin induced liver disease, which method comprises:

A. Administering a therapeutically effective amount of the compound.

68. (New) The method of treatment of claim 59 of a human being diagnosed as having arthritis, metastases, meningitis, salpingitis, septic shock, respiratory diseases, inflammatory condition, cholangitis, colitis, encephalitis, endocervicitis, hepatitis, pancreatitis, reperfusion injury, ischemic diseases, myocardial infarction, stroke, ischemic kidney disease immune-based diseases, hypersensitivity, multiple sclerosis, bone diseases; and neurodegenerative diseases, Alzheimer's, Amyotrophic Lateral Sclerosis (ALS), Huntington's disease, Parkinson's disease, meningitis, spinal cord injuries and liver damage, traumatic brain injury, alopecia, AIDS and toxin induced liver disease, which method comprises:

A. Administering a therapeutically effective amount of the compound.

69. (New) The method of treatment of claim 60 of a human being diagnosed as having arthritis, metastases, meningitis, salpingitis, septic shock, respiratory diseases, inflammatory condition, cholangitis, colitis, encephalitis, endocervicitis, hepatitis, pancreatitis, reperfusion injury, ischemic diseases, myocardial infarction, stroke, ischemic kidney disease immune-based diseases, hypersensitivity, multiple sclerosis, bone diseases; and neurodegenerative diseases, Alzheimer's, Amyotrophic Lateral Sclerosis (ALS), Huntington's disease, Parkinson's disease, meningitis, spinal cord injuries and liver damage, traumatic brain injury, alopecia, AIDS and toxin induced liver disease, which method comprises:

A. Administering a therapeutically effective amount of the pharmaceutical composition of Claim 25.

70. (New) The method of treatment of claim 71 of a human being diagnosed as having arthritis, metastases, infectious diseases, meningitis, salpingitis, septic shock, respiratory diseases, inflammatory condition, cholangitis, colitis, encephalitis, endocervicitis, hepatitis, pancreatitis, reperfusion injury, ischemic diseases, myocardial infarction, stroke, ischemic kidney disease immune-based diseases, hypersensitivity, multiple sclerosis, bone diseases; and neurodegenerative diseases, Alzheimer's, Amyotrophic Lateral Sclerosis (ALS), Huntington's disease, Parkinson's disease, meningitis, spinal cord injuries and liver damage, traumatic brain injury, alopecia, AIDS and toxin induced liver disease, which method comprises:

method comprises:

- A. Administering a therapeutically effective amount of the compound.